

Larva Pupa Practice Set 2

Scoring Form

Project: NAEP

Grade: 8

Subject: Science

Item: F2S11_10 Larva pupa statement supports data

Scorer Name: _____

ID#: _____

Date: _____

P1	<i>Reader Score</i>	<i>Actual Score</i>
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
		%

P2	<i>Reader Score</i>	<i>Actual Score</i>
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
		%

Larva Pupa Practice Set 2

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NAEP Wiki: <http://opi.mt.gov/groups/montananaep/>

NAEP: The One Stop Shop for Teachers

2:00 PM-3:50 PM

MS 204

Teachers will gain hands-on experience with released items specifically learning how to: create assessments, score items, and map items. Lastly, teachers will learn how NAEP science frameworks can be paralleled to NGSS and learn how MT students performed on released items.

Larva Pupa Practice Set 2

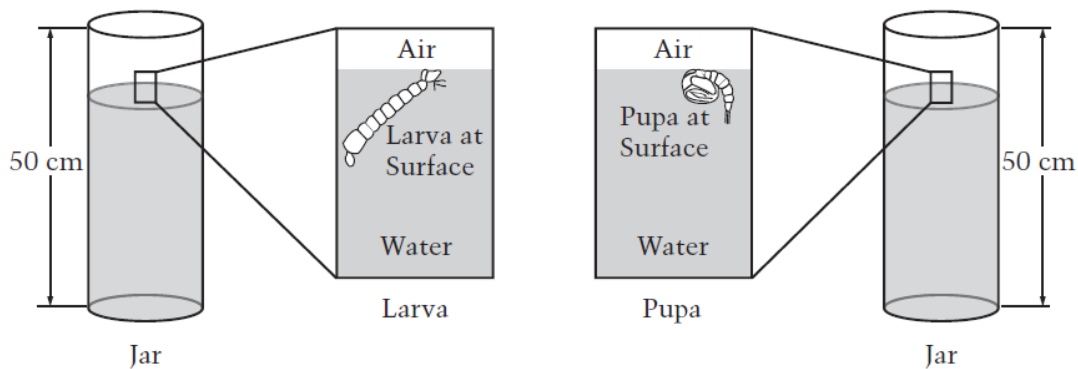
Item: Larva pupa statement supports datap.1

Questions 10–13 refer to the following investigation.

Some students were studying the life cycle of mosquitoes. They learned that mosquito larvae and pupae spend part of their time at the surface of water.

The students wanted to find out how a larva and pupa behaved when the jars they were in were disturbed. They put one larva and one pupa in identical tall jars of water at 20°C as shown below.

JARS WITH LARVA AND PUPA



The students tapped on the jars when the larva and pupa were at the surface of the water. The larva and pupa dove down into the jars, and then slowly came to the surface.

The students measured the depth each larva and pupa reached and the amount of time each stayed underwater. The students repeated this step five times and calculated the average of each of their measurements.

Their results are summarized in the table below.

DATA TABLE

Number of Trials	Larva		Pupa	
	Average Depth Reached (centimeters)	Average Length of Time Underwater (seconds)	Average Depth Reached (centimeters)	Average Length of Time Underwater (seconds)
5	22	90	38	120

Larva Pupa Practice Set 2

Item: Larva pupa statement supports datap.2

10. Which statement(s) is (are) supported by these data? You may fill in more than one oval.

- Ⓐ The larva dives deeper than the pupa.
- Ⓑ The larva stays underwater longer than the pupa.
- Ⓒ The length of the larva affects the depth of its dive.
- Ⓓ The pupa dives deeper than the larva.
- Ⓔ The pupa stays underwater longer than the larva.
- Ⓕ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

Larva Pupa Practice Set 2

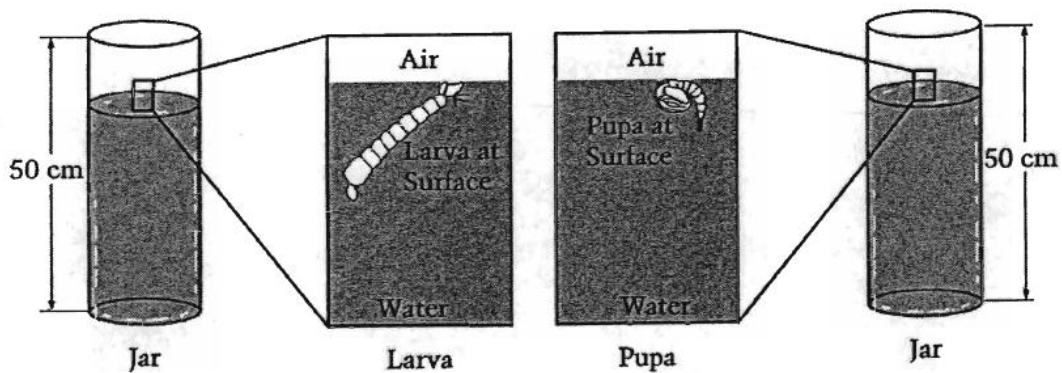
Item: Larva pupa statement supports datap.3

Questions XX–XX refer to the following investigation.

Some students were studying the life cycle of mosquitoes. They learned that mosquito larvae and pupae spend part of their time at the surface of water.

The students wanted to find out how a larva and pupa behaved when the jars they were in were disturbed. They put one larva and one pupa in identical tall jars of water at 20°C as shown below.

JARS WITH LARVA AND PUPA



The students tapped on the jars when the larva and pupa were at the surface of the water. The larva and pupa dove down into the jars, and then slowly came to the surface.

The students measured the depth each larva and pupa reached and the amount of time each stayed underwater. The students repeated this step five times and calculated the average of their measurements.

Their results are summarized in the table below.

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Number of Trials	Larva		Pupa	
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5	22	90	38	120

Larva Pupa Practice Set 2

Item: Larva pupa statement supports datap.4

Content Area	Life Science
Content Topic - Subtopic	Structures and Functions of Living Systems - Interdependence
Content Statement	L8.6: Two types of organisms may interact with one another in several ways: They may be in a producer/consumer, predator/prey, or parasite/host relationship. Or, one organism may scavenge or decompose another. Relationships may be competitive or mutually beneficial. Some species have become so adapted to each other that neither could survive without the other.
Science Practice	Using Scientific Inquiry
Cognitive Demand	Knowing How
Achievement Level	

Item:

VC305048

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

- A. The larva dives deeper than the pupa.
- B. the larva stays underwater longer than the pupa.
- C. The length of the larva affects the depth of its dive.
- D. The pupa dives deeper than the larva.
- E. The pupa stays underwater longer than the larva.
- F. The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

Larva Pupa Practice Set 2

Anchor Set.....p.1

Paper	Ref #	Score	Notes
A-1	033226	4	The response selects (D) and (E) and refers to the data in the table to explain both selections. The response provides explanations for selecting (D) <i>the pupa dives 38(cm) and the larva dives 22(cm)</i> and for selecting (E) <i>the pupa stays underwater 120 seconds and the larva stays underwater 90 seconds.</i>
A-2	032669	4	The response selects (D) and (E) and refers to the data in the table to explain both selections. The response provides explanations for selecting (D) <i>the pupa's average depth was 16 centimeters deeper then the larva's</i> and for selecting (E) <i>The pupa was also underwater 30 seconds longer then the larva.</i>
A-3	033327	4	The response selects (D) and (E) and refers to the data in the table to explain both selections. The response provides explanations for selecting (D) and (E) <i>the averade length of time underwater the pupa had was 120 seconds and the average depth reached was 38 centimeters.</i> The data for larva is not needed.
A-4	032622	3	The response selects (D) and (E) and refers to the data in the table to explain one of the selections <i>larva only gose 22 ce down deeper. But the pupa 38 ce down.</i>
A-5	033297	2A	The response selects (D) and (E) but does not refer to the data in the table to explain either selection. The response provides an incomplete explanation for selecting (D) and (E) <i>the average depth is greater than the larva and average length of time is greater than the larva.</i> 2A(a)

Larva Pupa Practice Set 2

Anchor Setp.2

A-6	033352	2A	The response selects (D) and (E). The response does not refer to the data in the table but provides general explanations for (D) and (E). 2A(a)
A-7	033409	2A	The response selects (D) and (E). The response does not refer to the data in the table and does not provide any explanation. 2A(b)
A-8	033381	2B	The response selects (D), (E) and (C), (F) and refers to the data in the table. The response provides explanations for selecting (D) and (E) <i>the larva dives at 22 cm the pupa dives at 38 cm . . . larva stays underwater 90 sec, the pupa 120</i> . For the incorrect selections (C) and (F) <i>their shapes . . . could effect the dive</i> . 2B(a)
A-9	000006	2B	The response selects (D). The response also refers to the data in the table <i>the larva dove 22 centimeters, while the pupa dove 38 centimeters</i> . 2B(b)
A-10	033302	2B	The response selects (E). The response also refers to the data in the table <i>larva stays under for 90 sec but the pupa stays 120 sec</i> . 2B(c)
A-11	033318	1A	The response selects (D), (E) and (C), (F). The response does not refer to the data in the table but provides general explanations for selecting (D), (E), (C), (F). 1A(a)
A-12	033341	1B	The response selects (A) and (B). The response does not refer to the data in the table but provides general explanations for (A) and (B).

Larva Pupa Practice Set 2

Anchor Set 4.....p.1

WFMID: Z3525900	Grade 08	Subject SC	Batch I0016900
NAEP 2009		Import Item ID 09F2S11_10	Sequence 0000033226
UIN 00033698798213200902			PAS 001600489
			Clip VC305048

A-1
(4)

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

- ☐ Ⓐ The larva dives deeper than the pupa.
- ☐ Ⓑ The larva stays underwater longer than the pupa.
- ☐ Ⓒ The length of the larva affects the depth of its dive.
- ☒ Ⓓ The pupa dives deeper than the larva.
- ☒ Ⓔ The pupa stays underwater longer than the larva.
- ☐ Ⓕ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

I picked that the pupa dives deeper than the larva because the pupa dives 38 cm and the larva dives 22 cm. I also picked the pupa stays underwater longer than the larva because the pupa stays underwater 120 seconds and the larva stays underwater 90 seconds.

WFMID: Z3525900	Grade 08	Subject SC	Batch I0069900
NAEP 2009		Import Item ID 09F2S11_10	Sequence 0000032669
UIN 00033043738211200902			PAS 006900179
			Clip VC305048

A-2
(4)

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

- ☐ Ⓐ The larva dives deeper than the pupa.
- ☐ Ⓑ The larva stays underwater longer than the pupa.
- ☐ Ⓒ The length of the larva affects the depth of its dive.
- ☒ Ⓓ The pupa dives deeper than the larva.
- ☒ Ⓔ The pupa stays underwater longer than the larva.
- ☐ Ⓕ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

The data supports the statements I selected because the pupa's average depth was 16 centimeters deeper than the larva's. The pupa was also underwater 30 seconds longer than the larva.

Larva Pupa Practice Set 2

Anchor Set 3p.2

WFMID: Z3525900		Sequence 0000033327	
NAEP 2009	Grade 08	Subject SC	Batch I0275900
UIN 00033732838213200902	Import Item ID 09F2S11_10	PAS 027500425	Clip VC305048

A-3
④

VC305048

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

- ☐ Ⓐ The larva dives deeper than the pupa.
- ☐ Ⓑ The larva stays underwater longer than the pupa.
- ☐ Ⓒ The length of the larva affects the depth of its dive.
- ☒ Ⓓ The pupa dives deeper than the larva.
- ☒ Ⓔ The pupa stays underwater longer than the larva.
- ☐ Ⓕ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

The average length of time underwa
the pupa had was 120 seconds
and the average depth reached
was 38 centimeters.

WFMID: Z3525900		Sequence 0000032622	
NAEP 2009	Grade 08	Subject SC	Batch I0301900
UIN 00021461259807200902	Import Item ID 09F2S11_10	PAS 030100537	Clip VC305048

A-4
③

VC305048

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

- ☐ Ⓐ The larva dives deeper than the pupa.
- ☐ Ⓑ The larva stays underwater longer than the pupa.
- ☐ Ⓒ The length of the larva affects the depth of its dive.
- ☒ Ⓓ The pupa dives deeper than the larva.
- ☒ Ⓔ The pupa stays underwater longer than the larva.
- ☐ Ⓕ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

I used this because larva only got 22cm
down deeper. But the pupa 38cm down.

Larva Pupa Practice Set 2

Anchor Set 2A.....p.3

WFMD: Z3525900		Sequence 0000033297	
NAEP 2009	Grade 08	Subject SC	Batch I0240900
UIN 00033725658213200902		Import Item ID 09F2S11_10	PAS 024000266
			Clip VC305048

A-5
(2A)

VC305048

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

☐ Ⓐ The larva dives deeper than the pupa.

☐ Ⓑ The larva stays underwater longer than the pupa.

☐ Ⓒ The length of the larva affects the depth of its dive.

☒ Ⓓ The pupa dives deeper than the larva.

☒ Ⓔ The pupa stays underwater longer than the larva.

☐ Ⓕ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

I chose that the pupa dives deeper and stays underwater longer because the average depth is greater than the larva and average length of time is greater than the larva.

WFMD: Z3525900		Sequence 0000033352	
NAEP 2009	Grade 08	Subject SC	Batch I0013900
UIN 00033746298215200902		Import Item ID 09F2S11_10	PAS 001300328
			Clip VC305048

A-6
(2A)

VC305048

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

☐ Ⓐ The larva dives deeper than the pupa.

☐ Ⓑ The larva stays underwater longer than the pupa.

☐ Ⓒ The length of the larva affects the depth of its dive.

☒ Ⓓ The pupa dives deeper than the larva.

☒ Ⓔ The pupa stays underwater longer than the larva.

☐ Ⓕ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

I did not select any statements about size or shape because there was no information about that on the table. The ones I chose say that the pupa dives deeper + stays underwater longer, because that's what the table shows.

Larva Pupa Practice Set 2

Anchor Set 2A.....p.3 Continued

WFMD: Z3525900		Sequence 0000033409	
NAEP 2009	Grade 08	Subject SC	Batch I0128900
UIN 00033758458215200902		Import Item ID 09F2S11_10	PAS 012800485
			Clip VC305048

A-7

2A

VC305048

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

- ☐ Ⓐ The larva dives deeper than the pupa.
- ☐ Ⓑ The larva stays underwater longer than the pupa.
- ☐ Ⓒ The length of the larva affects the depth of its dive.
- ☐ Ⓓ The pupa dives deeper than the larva.
- ☐ Ⓔ The pupa stays underwater longer than the larva.
- ☐ Ⓕ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

no explanation

Anchor Set 2B.....p.4

WFMD: Z3525900		Sequence 0000033381	
NAEP 2009	Grade 08	Subject SC	Batch I0138900
UIN 00033751588215200902		Import Item ID 09F2S11_10	PAS 013800360
			Clip VC305048

A-8

2B

VC305048

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

- ☐ Ⓐ The larva dives deeper than the pupa.
- ☐ Ⓑ The larva stays underwater longer than the pupa.
- ☐ Ⓒ The length of the larva affects the depth of its dive.
- ☐ Ⓓ The pupa dives deeper than the larva.
- ☐ Ⓔ The pupa stays underwater longer than the larva.
- ☐ Ⓕ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

It says the larva dives at 22cm the pupa dives at 38 cm, so the pupa dives farthest. The larva stays underwater 40sec, the pupa 120, so the pupa stayed under water longer. And their shapes are the only thing that could effect the dive.

Larva Pupa Practice Set 2

Anchor Set 2B.....p.4 Continued

WFMID: Z3524900

NAEP 2009

Grade 08

Subject SC

Batch I0003900

UIN 00020247329813200902

Import Item ID 09F2S11_10

Sequence 0000000006

PAS 000300060

Clip VC305048

A-9
(2B)

VC305048

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

- ☐ Ⓐ The larva dives deeper than the pupa.
- ☐ Ⓑ The larva stays underwater longer than the pupa.
- ☐ Ⓒ The length of the larva affects the depth of its dive.
- ☒ Ⓓ The pupa dives deeper than the larva.
- ☐ Ⓔ The pupa stays underwater longer than the larva.
- ☐ Ⓕ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

The Data Table says that the larva dove 22 centimeters, while the pupa dove 38 centimeters.

Larva Pupa Practice Set 2

Larva Pupa Practice Set 2

Practice Set 2 Score Guide.....p.1

	Code	Description
Complete	4	<p>Student response selects (D) AND (E) and refers to the data in the table to explain both selections. Student explanation needs to cite numeric data from the table. No selections of (A), (B), (C), and (F) are included.</p> <p>Major response types supporting (D) include:</p> <ul style="list-style-type: none"> • The pupa dove (reached) 38 cm compared to the larva that dove (reached) 22 cm. • The pupa dove 16 cm deeper than the larva. <p>Major response types supporting (E) include:</p> <ul style="list-style-type: none"> • The pupa stayed underwater for 120 seconds compared to the larva that stayed underwater for 90 seconds. • The pupa stayed underwater 30 seconds longer than the larva. <p>For example:</p> <ul style="list-style-type: none"> • (D), (E) The data table shows the pupa dived 38 cm, while the larva only dived 22 cm. This proves the pupa dives deeper than the larva. The data table also shows the pupa stayed in the water 120 seconds (2 minutes), while the larva stayed in the water 90 seconds (1 minute and a half). Proving the pupa stays under water longer than the larva. • (D), (E) because the pupa did dive deeper than the larva by 16 cm. and the pupa did stay under water longer than the larva by 30 sec. • (D), (E) The table tells me that the pupa stayed under an average 120 seconds underwater, and also it went farther down an average at 38 centimeters. • (D), (E) I selected the statements because the following: 1). On the data table it said that the pupa dives deeper about 14 cm. 2). On the table it also said that were dove in the water longer about 40 sec. (ignore incorrect math calculations)

Essential	3	<p>Student response selects (D) and (E) and refers to the data to explain one of the selections. The explanation for the other selection is either incorrect or absent. No selections of (A), (B), (C), and (F) are included.</p> <p>For example:</p> <ul style="list-style-type: none"> • (D), (E) Pupa dive deeper than larva because they reached 38 centimeters and the larva only reached 22 centimeters. The larva stayed underwater longer. • (D), (E) Larva stayed underwater for 90 seconds compared to 120 seconds for the pupa.
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	2A	<p>(a) Student response selects (D) AND (E) with an incomplete explanation. No selections of (A), (B), (C), and (F) are included.</p> <p>For example:</p> <ul style="list-style-type: none"> • (D), (E) Because on the data table it shows the seconds for how long they stayed under water and the depth in centimeters for how far they went and the pupa stayed under longer and went down farther than the larva did. • (D), (E) I chose these statements because the pupa's averages were bigger than the larva's averages. <p>(b) Student response selects (D) AND (E) with no explanation. No selections of (A), (B), (C), and (F) are included.</p> <p>For example:</p> <ul style="list-style-type: none"> • (D), (E)
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Larva Pupa Practice Set 2

Practice Set 2 Score Guide Continued.....p.2

Partial		<p>(a) Student response selects (D) and (E) and refers to the data to explain the selection(s). Incorrect statements (A), (B), (C), and (F) may also have been chosen.</p> <p>For example:</p> <ul style="list-style-type: none"> • (C), (D), (E), (F) I chose "C" because the larva was longer and didn't dive as far. I chose "D" because the pupa dove 38 cm and the larva dove 22 cm. I chose "E" because the pupa stayed under 120 sec, and the larva only stayed under 90 sec. I chose "F" because the round shape of the pupa allowed it to go deeper, and it's not as heavy. • (C), (D), (E) According to the graph, the pupa went 38 cm. while the larva went 22cm. <p>(b) Student response selects (D) and refers to the data to explain the selection. Incorrect statements (A), (B), (C), and (F) may also have been chosen.</p> <p>For example:</p> <ul style="list-style-type: none"> • (D) The pupa dives up to 38 cm deep and the larva only dives 22 cm in the water. • (D), (F) the shape is like a ball so it's probably heavy so it makes the pupa reach 38 cm in depth and 120 seconds. <p>2B (c) Student response selects (E) and refers to the data to explain the selection. Incorrect statements (A), (B), (C), and (F) may also have been chosen.</p> <p>For example:</p> <ul style="list-style-type: none"> • (E) The data table tells me the pupa stayed underwater for 120 sec. and the larva stayed underwater for 90 sec. <p>(d) Student response selects (D) and refers to the data to explain statement (E) or selects (E) and refers to the data to explain statement (D). Incorrect statements (A), (B), (C), and (F) may also have been chosen.</p> <p>For example:</p> <ul style="list-style-type: none"> • (E) The pupa dove 38cm. while the larva dove 22cm, so the pupa dove deeper. <p>(e) Student response makes no selection and refers to the data to explain statement (D) and/or statement (E).</p> <p>For example:</p> <ul style="list-style-type: none"> • No selection. The pupa dove 38 cm and the larva dove 22cm. The pupa stayed underwater for 120 seconds and the larva stayed underwater for 90 seconds.
Unsatisfactory/Incorrect	1A	<p>(a) Student response selects (D) and/or (E) with an incomplete or no explanation. Incorrect statements (A), (B), (C), and (F) may also have been chosen.</p> <p>For example:</p> <ul style="list-style-type: none"> • (E) The table shows that the pupa stayed underwater longer and dove deeper in the jar than the larva did. Plus, the larva is longer, and doesn't have much room to dive down to. <p>(b) Student response selects (D) and/or (E) with an incorrect explanation. Incorrect statements (A), (B), (C), and (F) may also have been chosen.</p> <p>For example:</p> <ul style="list-style-type: none"> • (D) The pupa can go down deeper because it is more developed than the little larva, so it can dive deeper than the larva. • (A), (D) because the larva dives deeper or it may not maybe the pupa is deeper and/or both take turns. <p>(c) Student response makes no selection with an incomplete or incorrect explanation.</p>
	1B	<p>Student response selects (A), (B), (C) or (F) with or without an explanation.</p> <p>For example:</p> <ul style="list-style-type: none"> • (C) The larva is bigger in size so that means it's heavier than the pupa. It may take longer to rise to the top. • (A), (B), (C) Because the larva is longer than the pupa and when they both come to surface, the larva stays under longer.

Larva Pupa Practice Set 2

Practice Scoring real CR Responses..Practice Set 2 Repsonses....p.1

WFMID: Z3525900		Sequence 0000033310	
NAEP 2009	Grade 08	Subject SC	Batch I0275900
UIN 00033729418213200902	Import Item ID 09F2S11_10	PAS 027500083	Clip VC305048

P2-1

VC305048

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

☐ Ⓐ The larva dives deeper than the pupa.
☒ Ⓑ The larva stays underwater longer than the pupa.
☐ Ⓒ The length of the larva affects the depth of its dive.
☒ Ⓓ The pupa dives deeper than the larva.
☐ Ⓔ The pupa stays underwater longer than the larva.
☐ Ⓕ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

Because the data clearly states the larva stays underwater longer. & the pupa dives deeper than the larva

Practice Set 2 Repsonses....p.2

WFMID: Z3525900		Sequence 0000033323	
NAEP 2009	Grade 08	Subject SC	Batch I0275900
UIN 00033732308213200902	Import Item ID 09F2S11_10	PAS 027500372	Clip VC305048

P2-2

VC305048

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

☐ Ⓐ The larva dives deeper than the pupa.
☐ Ⓑ The larva stays underwater longer than the pupa.
☐ Ⓒ The length of the larva affects the depth of its dive.
☒ Ⓓ The pupa dives deeper than the larva.
☒ Ⓔ The pupa stays underwater longer than the larva.
☐ Ⓕ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

I selected these statements because these were the only two statements proven by the data shown. In both tests the pupa had higher results, but there is no data supporting the fact the the Pupa's shape helps it dive deeper than the larva

Larva Pupa Practice Set 2

Practice Set 2 Responses....p.3

WFMID: Z3525900		Sequence 0000033342	
NAEP 2009	Grade 08	Subject SC	Batch I0013900
UIN 00033744518215200902	Import Item ID 09F2S11_10	PAS 001300150	Clip VC305048

P2-4

VC305048

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

☐ The larva dives deeper than the pupa.
☐ The larva stays underwater longer than the pupa.
☐ The length of the larva affects the depth of its dive.
☒ The pupa dives deeper than the larva.
☐ The pupa stays underwater longer than the larva.
☐ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

The pupa dives deeper than the larva because the depth of the pupa is 38 cm and the length of time underwater is 120 seconds.

WFMID: Z3525900		Sequence 0000033313	
NAEP 2009	Grade 08	Subject SC	Batch I0275900
UIN 00033729928213200902	Import Item ID 09F2S11_10	PAS 027500134	Clip VC305048

P2-3

VC305048

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

☐ The larva dives deeper than the pupa.
☐ The larva stays underwater longer than the pupa.
☐ The length of the larva affects the depth of its dive.
☒ The pupa dives deeper than the larva.
☒ The pupa stays underwater longer than the larva.
☐ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

The pupa is smaller so it can stay under water longer. The pupa dives deeper because it is smaller.

Larva Pupa Practice Set 2

Practice Set 2 Responses....p.4

WFMID: Z3525900		Sequence 0000032597	
NAEP 2009	Grade 08	Subject SC	Batch I0301900
UIN 00021456289807200902		Import Item ID 09F2S11_10	PAS 030100040
			Clip VC305048

P2-6

VC305048

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

↓

☐ Ⓐ The larva dives deeper than the pupa.

☐ Ⓑ The larva stays underwater longer than the pupa.

☐ Ⓒ The length of the larva affects the depth of its dive.

☐ Ⓓ The pupa dives deeper than the larva.

☐ Ⓔ The pupa stays underwater longer than the larva.

☐ Ⓕ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

The pupa stays under water for 120 seconds, 50 seconds longer than the larva. The pupa dives 38cm, 16 more than the larva.

WFMID: Z3525900		Sequence 0000032633	
NAEP 2009	Grade 08	Subject SC	Batch I0399900
UIN 00021473469807200902		Import Item ID 09F2S11_10	PAS 039900137
			Clip VC305048

P2-5

VC305048

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

☐ Ⓐ The larva dives deeper than the pupa.

☐ Ⓑ The larva stays underwater longer than the pupa.

☐ Ⓒ The length of the larva affects the depth of its dive.

☐ Ⓓ The pupa dives deeper than the larva.

☐ Ⓔ The pupa stays underwater longer than the larva.

☐ Ⓕ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

Because that's what the table showed.

Larva Pupa Practice Set 2

Practice Set 2 Repsonses....p.5

WFMID: Z3525900		Sequence 0000033465	
NAEP 2009	Grade 08	Subject SC	Batch I0213900
UIN 00033769918215200902		Import Item ID 09F2S11_10	PAS 021300481
			Clip VC305048

P2-7

VC305048

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

- ☐ Ⓐ The larva dives deeper than the pupa.
- ☐ Ⓑ The larva stays underwater longer than the pupa.
- ☒ Ⓒ The length of the larva affects the depth of its dive.
- ☐ Ⓓ The pupa dives deeper than the larva.
- ☒ Ⓔ The pupa stays underwater longer than the larva.
- ☐ Ⓕ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

Well on average the pupa stayed underwater 30 seconds longer than the larva.

WFMID: Z3525900		Sequence 0000032698	
NAEP 2009	Grade 08	Subject SC	Batch I0092900
UIN 00033048628211200902		Import Item ID 09F2S11_10	PAS 009200178
			Clip VC305048

P2-8

VC305048

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

- ☐ Ⓐ The larva dives deeper than the pupa.
- ☐ Ⓑ The larva stays underwater longer than the pupa.
- ☐ Ⓒ The length of the larva affects the depth of its dive.
- ☒ Ⓓ The pupa dives deeper than the larva.
- ☒ Ⓔ The pupa stays underwater longer than the larva.
- ☐ Ⓕ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

Because the pupa lives 16 centimeters deeper than the larva. The pupa also stays under water for 120 seconds.

Larva Pupa Practice Set 2

Practice Set 2 Responses....p.6

WF MID: Z3525900		Sequence 0000033272	
NAEP 2009	Grade 08	Subject SC	Batch I0182900
UIN 00033711468213200902		Import Item ID 09F2S11_10	PAS 018200333
			Clip VC305048

P2-9

VC305048

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

- ☒ Ⓐ The larva dives deeper than the pupa.
- ☐ Ⓑ The larva stays underwater longer than the pupa.
- ☐ Ⓒ The length of the larva affects the depth of its dive.
- ☐ Ⓓ The pupa dives deeper than the larva.
- ☐ Ⓔ The pupa stays underwater longer than the larva.
- ☐ Ⓕ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

The larva dives 22 deep.

WF MID: Z3525900		Sequence 0000033362	
NAEP 2009	Grade 08	Subject SC	Batch I0138900
UIN 00033748798215200902		Import Item ID 09F2S11_10	PAS 013800081
			Clip VC305048

P2-10

VC305048

Which statement(s) is (are) supported by these data? You may fill in more than one oval.

- ☐ Ⓐ The larva dives deeper than the pupa.
- ☐ Ⓑ The larva stays underwater longer than the pupa.
- ☐ Ⓒ The length of the larva affects the depth of its dive.
- ☒ Ⓓ The pupa dives deeper than the larva.
- ☒ Ⓔ The pupa stays underwater longer than the larva.
- ☒ Ⓕ The shape of the pupa helps it dive deeper than the larva.

Explain why you selected the statement(s) you did, using the data in the table.

The pupa was under the water for 120 seconds and it went 38cm down. The larva time and depth was a smaller number.